SPECTRO™ XR

High definition Thermal Imaging Channel	
Configuration	Spotter and continuous zoom optics combination
Sensor	1280x1024 InSb (standard)
	640x512 InSb (optional)
	1920x1080 InSb (optional)
Wavelength	3÷5µm
FOVs	1.0°, 3.7°÷25°
High definition Visible Channel with low light capabilities	
Configuration	Dual camera: dual FOV spotter and continuous zoom
Sensor	1920x1080 backside illuminated CMOS
Wavelength	Visible (color), Near IR (black/white)
FOVs	0.36°, 0.72°, 2.4°÷25°
Operational Modes	Color, Haze penetration, Low Light
Short Wave IR (SWIR) Channel	
Configuration	Dual FOV spotter
Sensor	640x512 InGaAs (standard)
	1280x1024 InGaAs (optional)
Wavelength	1.2µm÷1.7µm, 1.064µm (See-spot)
FOVs	0.25°, 0.57°
Laser Payloads	
Designator	Nd:YAG, 1064nm, up-to 22Hz, Class 4
Rangefinder	Nd:YAG/OPO, 1570nm, up to 3Hz, Class 1M
	Erbium Glass, 1534nm, up to 1Hz, Class 1
Illuminator	Diode, 808nm, 2W, Continuous / Pulsed, Class 4
Laser Spot Tracker	Quadrant Detector
Pointer	Diode, 830nm, 50mW, Continuous / Pulsed, Class 3B
Line-of-sight control and navigation	
Line-of-sight Stabilization	3µrad for typical fixed wing
	10µrad for typical rotary wing
Gimbals Dynamics	Az/El slew rate: 0÷60 °/sec
	Azimuth field of regard: continuous 360°
	Elevation field of regard: -120°÷+90°
Gimbals Configuration	2 axis inner gimbals (pitch / yaw)
	2 axis outer gimbals (azimuth / elevation)
	6 axis passive vibration dampers
IMU	Tactical grade, fiber-optics gyros
	Embedded Geo-pointing, Geo-steering and Geo-location
GNSS	Multi-constellation(GPS/GLONASS/Galileo), SBAS compatible
System Interfaces	
Video	5 digital SMPTE 292M/424M
	5 analog NTSC/PAL/STANAG-3350
Metadata	STANAG-4609 compliant
Data	1Gb Ethernet, MIL-STD-1553B, ARINC-429, RS-422
Power	MIL-STD-704E, 300÷450W (Avg.), <1100W (Max.)
Turret Specifications	
Weight	52kg (max sensors configuration)
Diameter	415mm
Height	500mm
Mounting	SAE AS6169 compatible

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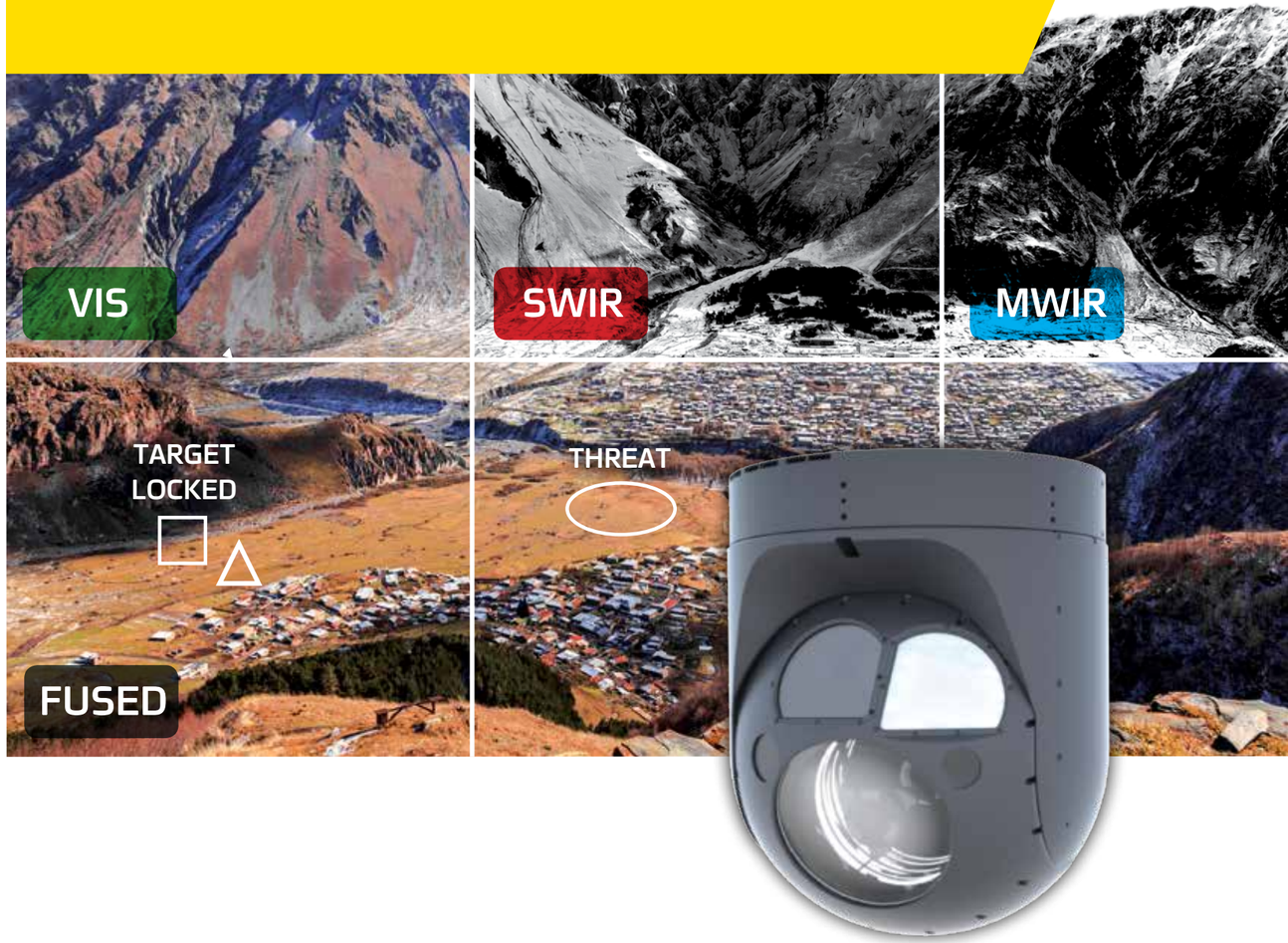
SPECTRO™ XR

Multi Spectral Electro Optical Payload



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SPECTRO XR

The Power To Foresee

Today's surveillance and intelligence requirements become increasingly challenging but it is for tomorrow's challenges that we truly need to be prepared. Foreseeing tomorrow's demands, we introduce SPECTRO XR (Extended range), An Ultra Long Range Multi-Spectral Electro-Optic Payload System that enables a leap forward in capability.

SPECTRO XR is a day/night, multi-spectral electro-optical ISTAR system that provides 20" payload performance in a 15" payload. The heart of the system is a multi-spectral imaging system that combines multiple optical channels into one, allowing to significantly improve performance without increasing size and weight. SPECTRO XR is equipped with a wide variety of digital imaging, high definition sensors and advanced lasers - all with very high levels of stabilization. SPECTRO XR exhibits high performance at day, night and adverse weather conditions. SPECTRO XR is designed and built for land, naval, fixed wing and rotary wing platforms.

SPECTRO XR was designed based on Elbit System's 20 year legacy in developing EO payloads leveraging the in house capabilities of sensors, lasers and system technologies to enable maximum performance within an optimal envelope, implementing the most cost effective production and quality control processes.

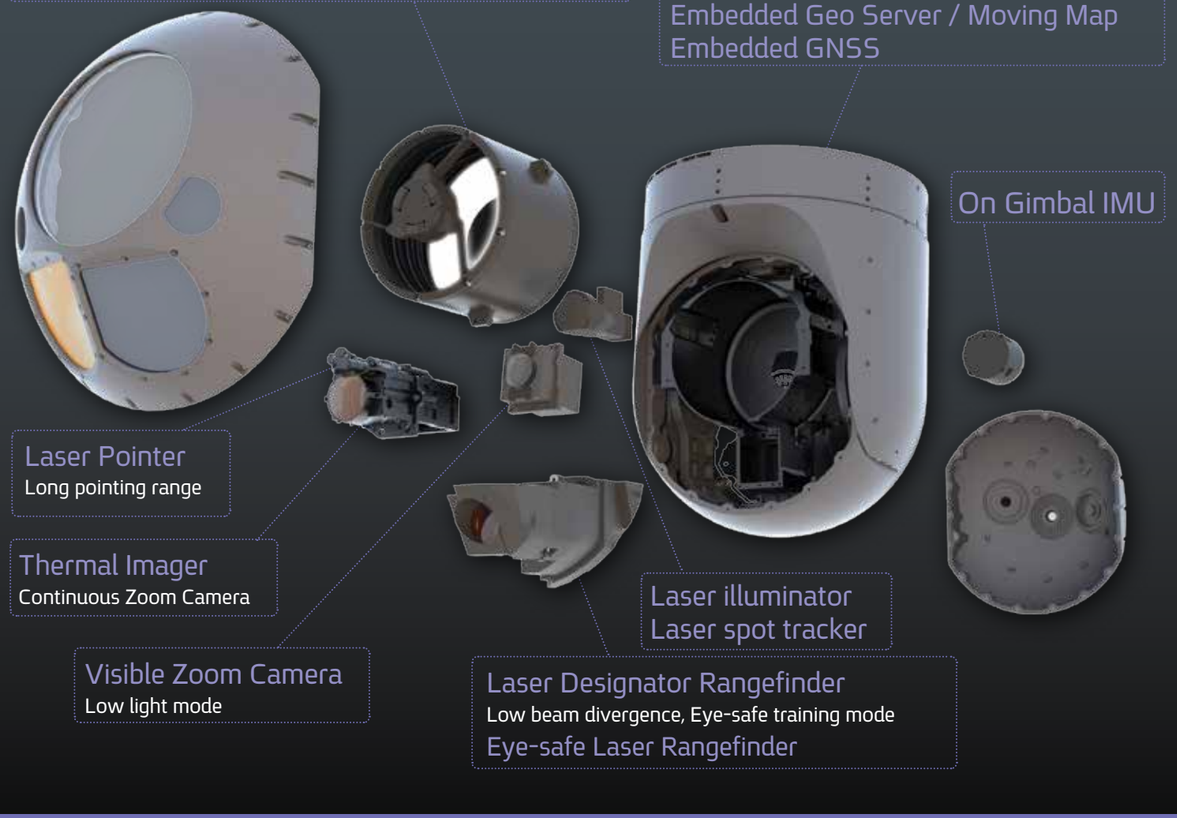
SPECTROX™
Multispectral Common Aperture Telescope

ScenerG™
High Definition Spectra-Spatial Image Fusion

LIGHTMARK™
Enhanced Multi Layered User Experience

PIVOPTIC™
Ultra Stabilized In-Motion EOP Design

SPOTON™
Advanced Geo-Location Insight System

Designed to lead

Insight into SPECTRO XR revolutionary set of sensors reveal a powerhouse of technology, packed in lightweight operational package.